



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada



Oat Breeding at AAFC Winnipeg/Brandon, MB

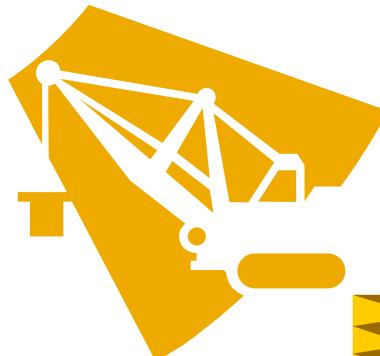
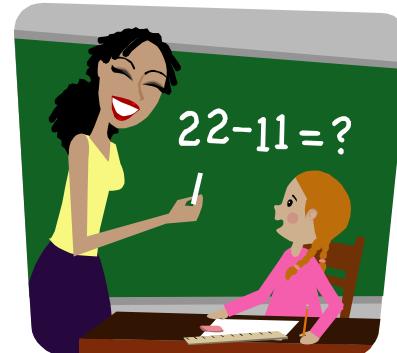
American Oat Workers Conference July 2014

Ottawa, ON

Speed Dating for Breeders Session

Canada

In other words, what have we been doing with all of our time????



Oat Cultivars from AAFC

2012

Stride (OT2069)

2013

AAC Justice (OT2084)

2014

**AAC Oravena
(OT8003)**



Stride

Strengths:

- Resistant to oat crown rust
- High yielding capacity
- High test weight, similar to Leggett
- High protein content
- High Beta-glucan and TDF
- Resistant to smut
- Moderately resistant to FHB, lower DON



Stride

Weaknesses:

- Higher oil content than the checks
- Intermediate to susceptible reaction to BYDV
- Later maturity than CDC Dancer
- Slightly lower % plumps and % groat than CDC Dancer



AAC Justice

Strengths:

- High Test weight
- High yield in the Black soil zone
- Good thousand kernel weight, percent groat and percent plumps
- Betaglucan content higher than checks
- Total Dietary Fibre content higher than checks



AAC Justice

Disease Resistance

- Barley Yellow Dwarf Virus tolerance better than checks
- Improved crown rust resistance, likely due to the presence of *Pc91*
- Improved seedling stem rust resistance, including resistance to NA67, possibly due to the presence of *Pg a*.



AAC Justice

Weaknesses:

- Oil/fat content higher than checks
- Lower protein content than Leggett
- Later maturing than CDC Dancer



AAC Oravena

Strengths:

- Yield similar to AC Morgan
- Heads earlier than CDC Dancer
- High thousand kernel weight
- High Test weight
- High total dietary fibre (TDF)
- Higher betaglucan (BG) and percent protein than CDC Dancer and AC Morgan



AAC Oravena

Disease Resistance:

- Resistant to smut
- Seedling resistance to crown rust and to stem rust, including NA67



AAC Oravena

Weaknesses:

- Susceptible to BYDV
- Higher oil content
- Trace susceptibility to crown rust in field



Cereal Research Centre, Winnipeg, MB



Brandon Research Centre



The New Crew



Oat and Wheat Disease Nursery

July 9 2014





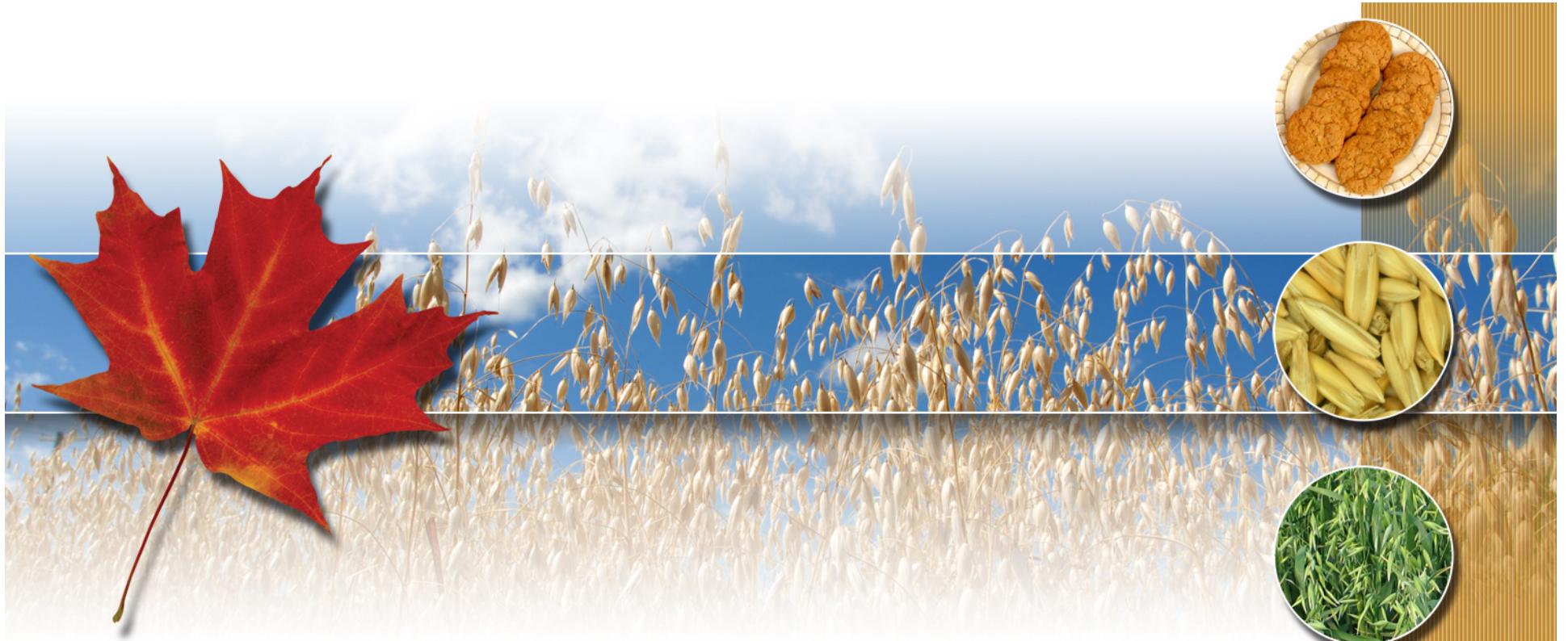
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THANK YOU

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